Cons of GM Mustard

Why in news?

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Genetic Engineering Appraisal Committee (GEAC) recently cleared the proposal for genetically modified (GM) mustard.

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How effective was Bt Cotton?

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- Bt cotton promised of higher yield and lower pesticide usage in the 1990s.
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- Despite increased fertilisers and irrigation, the expectations of enhanced cotton yield have not been realised.
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- Most of the countries that have higher cotton yields than India do not grow GM cotton.
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What are the shortcomings of GM Mustard?

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- **Yield -** The yield claims on GM mustard are not very reliable.
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- U.S. and Canada uses GM mustard.
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- But the highest yields in mustard are from the five countries which do not grow GM mustard — U.K., France, Poland, Germany and Czech Republic.
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- **Evaluation -** The risks to health, environment and agriculture have not been evaluated.
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- Those inadequate tests which were conducted on Bt brinjal were also ignored, even though mustard is far more extensively grown and consumed

than brinjal.
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- HT (herbicide tolerant) GM crops have been condemned by a number of medical professionals.
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- **Weed -** A herbicide-tolerant crop promotes constant exposure to a single herbicide — which eventually results in weeds becoming resistant.
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- **Health -** A scientific report from Argentina found a fourfold increase in birth defects and a threefold increase in childhood cancers in HT soya areas.
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- Studies have shown a strong correlation between growth of GM crops & herbicides used in U.S. and diseases such as acute kidney injury, diabetes, autism, Alzheimer's and cancers.
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- Seventeen of the 20 most developed countries — including Japan, Russia, Israel and most of Europe — refuse to grow GM crops.
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- The millions of poor women who depend on weeding to support their family will be displaced.
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- Indian will lose its seed diversity and the international competitive advantage of its non-GM mustard.
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What should be done?

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- If India wants to increase its mustard yield rapidly and safely, this can be done by adopting the practice of System of Mustard Intensification.
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- Successful trials have been done in Bihar through a World Bank and results showed higher yields and better income.
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Source: The Hindu

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